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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,007	10/17/2001	Jonas Persson	027557-070	3798

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Ronald L. Grudziecki
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

HUYNH, NAM TRUNG

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/978,007	PERSSON, JONAS	
	Examiner	Art Unit	
	Nam Huynh	2688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/25/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyake (US 5,732,334).

A. Regarding claim 1, Miyake discloses a transmitter and method for controlling the radio transmission of a transmitter that comprises a transmission power control unit that further comprises:

- A power monitoring unit that includes an integrator that eliminates variations in the amplitude of the detection signal. Therefore rendering the claim limitation of “using information relating to statistical variations in the amplitude of the information signal”.
- A variable gain element for adjusting the power of the RF Signal (information signal) by means of gain control to furnish an RF output signal having the predetermined power (column 3, lines 38-44). This variable gain element varies a gain according to the value of the control signal applied (column 3, lines 53-54).

B. Regarding claims 2 and 5, Miyake discloses a method for controlling the magnitude, or power, of an RF output signal to be furnished by a radio transmitter comprising:

- A power monitoring unit (detector) for monitoring the RF output signal or detecting output power from the RF transmitter (column 4, line 28). This step renders the limitation of producing a “detected power control system”. This unit also from the monitored signal, obtains an average power level of the RF output signal (column 4, lines 28-29). This step renders the limitation of “calculating or measuring an expected mean power level”.
- An error calculating unit (power level calculation unit) for calculating an error level from the difference between the average power level and reference power data, which corresponds to the predetermined power of the RF output signal (column 4, lines 29-32). The value of the control signal is then corrected by using this error level and coefficient data. This step discloses the limitation of “calculating the difference between the expected mean power level and a reference mean power level, and producing a calculated power control signal from the difference and a nominal power level” in that the error level renders the “calculated power control signal” and “nominal power level”, the average power level renders the “expected mean power level”, and the reference power data renders the “reference mean power level”.
- The step of adjusting the value of the control signal on the basis of the error data and reference control data (column 4, lines 34-38). This step renders the limitation of “comparing the calculated power control signal with the detected power control signal” in that the control signal is adjusted based on the error

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data, or "calculated power control signal". The reference control data defines an initial value of the control signal (column 6, lines 42-46).

- The control signal is then used for controlling the variable gain element (column 8, lines 14-17). Therefore rendering the "gain power control signal".
- The gain control element (gain control unit) then varies a gain according to the value of the control signal and furnishes an RF output signal having the predetermined power (column 3, lines 38-44 and column 3, lines 53-54).

Therefore rendering the limitation of "supplying the gain power control signal to the radio frequency transmitter".

C. Regarding claims 3, 6, and 9, Miyake discloses a transmission power control unit that includes a detector for detecting an envelope to furnish a detection signal, and an integrator for eliminating variations in the amplitude of the detection signal to furnish the average power level of the RF output signal (column 3, lines 44-49). The integrator acts like a low-pass filter and eliminates the variations of the detection signal due to the modulation, the variations having relatively higher frequencies as compared with the duration of time slots, and outputs a signal representing an average level of an input signal within each time slot (column 7, lines 35-44). Therefore, the limitation set forth in the claim of producing a "measured power level signal" is rendered by the detection signal and the "attenuating" is done by the integrator. Furthermore the integrator outputs a signal representing an average level of an input signal, therefore rendering a signal "which is proportional".

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D. Regarding claims 4, 7, and 10, Miyake discloses that the power signal, which is the output of the integrator (where attenuation occurs), has a final value, or “nominal level”. The time constant of the integrator is set to eliminate variations in the detection signal and obtain the average level of the power signal within each of the transmission time slots (column 7, lines 54-65). Therefore the integrator attenuates the power signal until a final or nominal value is achieved which further shows that the “attenuation amount” (integrator time constant) is proportional to the “nominal power level” (final value).

E. Regarding claim 8, the limitations are rejected as applied to claims 2 and 5.

Miyake further discloses the following:

- An intermediate frequency (IF) signal that is delivered by an oscillating circuit of “waveform generator” (column 6, lines 12-15).
- A transmission power control unit that includes a variable gain element for adjusting the power of the RF signal by means of gain control, and a linear amplifier for linearly amplifying the RF signal adjusted by the variable gain element to furnish the RF output signal having the predetermined power (column 3, lines 39-44).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam Huynh whose telephone number is 571-272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NTH
2/14/06


GEORGE ENG
SUPERVISORY PATENT EXAMINER